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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/781,855 | 02/20/2004 | Werner Doetsch | 038715.53046US | 1653 |
| 23911 | 7590 | 07/05/2005 | EXAMINER | |
| CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300 | | | | SAYALA, CHHAYA D |
| | | ART UNIT | | PAPER NUMBER |
| | | 1761 | | |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/781,855 | DOETSCH ET AL. |
| | Examiner | Art Unit |
| | C. SAYALA | 1761 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 April 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date, _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 63270612 or RU 2073436.

Each of these patents teaches a composition containing alkaline earth peroxide and boron.

In '612, the ratios compare with the peroxide content and taken with the boron content of the specification compare well with the instant invention.

In '436, the amounts of calcium peroxide and boron are given as being 40-99.9% by wt. and 0.1-60.0 % by wt. respectively.

2. Claims 1-3 and 8-11 are under 35 U.S.C. 102(b) as being anticipated by GB 1580248.

The patent teaches treating sugar beet seeds with calcium peroxide, 0.01 and 90.0% by weight, for improving the quality of the beet. The boron additive is added in an amount 0 to 10%, preferably 0 to 5% by wt. (see page 2, lines 10-25; page 1, lines 25-30).

Claim Rejections - 35 USC § 102/Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 61033104.

The patent teaches magnesium peroxide and boron. The rejection is being made under both statutes because a translation of the reference is not immediately on hand.

Claim Rejections - 35 USC § 103

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doetsch et al. (US Patent 6193776) or Farone et al. (US Patent 5395419) in view of GB 1580248 and further in view of GB 1575792.

Doetsch et al. teach a homogeneous calcium/magnesium peroxide with an active oxygen content of 10-18% by wt. Farone et al. also teach treating plant media with calcium or magnesium peroxide, which delivers oxygen. See abstract, col. 14, lines 30-43. Both patents do not teach the boron.

The GB '248 teaches a calcium peroxide amount of up to 50% and 0 to 5% of boric acid in a solution which are fed into a granulator and then dried. A granulator inherently would mix the ingredients to homogeneity. See PTO-form 892, which furnishes a reference that establishes this as a fact.

It would have been obvious to treat the peroxygenated of the prior references also by treating them with boric acid, which adds stability to the peroxygenated compounds.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the peroxygenated compounds of the primary references with boric acid which adds stability to the peroxygenated compounds, as taught by '792 to form dry homogeneous granules by the method of GB '248. See page 2, lines 18-30. To incorporate the method of '248 in '776 or '419 in order to introduce boron compounds to their composition would have been obvious to one of ordinary skill in the art at the time was made, particularly to add stability to the peroxygenated compounds as disclosed by '792.

Response to Arguments

Applicant's arguments filed 4/12/05 have been fully considered but they are not persuasive.

On page 2, applicant states that the abstract of JP63270612 does not contain any boron compound. This is incorrect.

Next applicant describes "A peroxide doped with boron refers to a peroxide with boron within the peroxide crystal lattice". This definition could not be found in the specification. A review of the entire specification failed to disclose where such a definition exists.

PTO form-892 lists dictionary meaning of "doped" from a chemical dictionary and Webster dictionary. The boron doped alkaline material is being interpreted as the alkaline material being treated or impregnated with boron as a dopant or the alkaline material being combined with a small amount of boron as a dopant. Applicant is thanked for providing the dictionary meaning of "homogeneous". The meaning pointed out by him " of uniform structure and composition" is now being adopted in interpreting the claims. However, this still does not enable the interpretation that "the boron is installed within the crystal lattice of the alkaline peroxide".

Applicant states that the RU abstract does not show an amount 0.2 - 60% and does not teach weight percentage. The rejection has now been corrected to remove the typographical error and reflects the 0.2 – 60 weight percent, and as for the abstract, it does disclose "weight percentage". Applicant states that "a liquid mixture does not amount to a doped composition as is claimed". However before the mixture is added to water, it does not exist as a homogeneous boron doped alkaline material. Note the amount of boron that is less than the peroxide.

At page 4, applicant states the benefits of his invention at lines 1-5. It is well settled that a patent cannot be properly granted for [an invention] which would flow naturally from the teaching of the prior art". *American Infra-Red Radiant Co. v Lambert*

Indus., Inc., 360 F.2d 977, 986 [149 USPQ 722 (CCPA 1958)], (8th Cir.) (quoting *Application of Libby*, 255 F.2d 412 [118 USPQ 194 (CCPA 1958)], CERT. DENIED, 385 U.S. 920 [151 USPQ 757](1966).

The rejection over GB 1580248 has been traversed on the grounds that the reference does not show homogeneity. First, "a uniform structure or composition throughout" is achieved simply by the use of a granulator. Second, applicant states that "the coating is provided as a non-uniform mixture of various components". This statement/fact could not be found in the reference. On the other hand, the reference teaches sugar beet seeds that are spherical. The coating agent is a solution until it is dried after the process. The granulation process is said to result in grains having a uniform smooth surface (page 2). Therefore, applicant's position is not agreed with.

Claims 1-7 were rejected over GB '792; that rejection has been withdrawn.

The traversal of the rejection of the instant claims over JP '104 has been considered and will be withdrawn when a translation of that document is received.

The rejection over Larson et al. at paragraph 5 of the last Office action has been withdrawn.

The rejection over Doetsch et al. or Farone et al. in view of the secondary references, has been re-written and applicant's traversal is now moot over the new grounds of rejection.

Conclusion

Art Unit: 1761

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA whose telephone number is 571-272-1405.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



C. SAYALA
Primary Examiner
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